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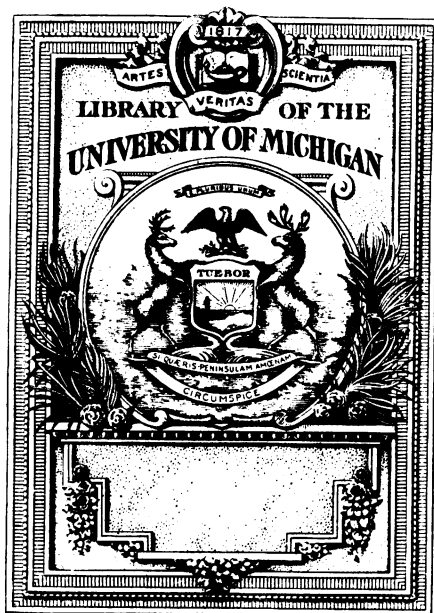
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PAPERS OF THE CONFERENCES

Held in connection with

the Exhibition

*The GREAT INTERNATIONAL
FISHERIES EXHIBITION*

Inaugural Meeting of the Fishery Congress

ADDRESS

BY

PROFESSOR HUXLEY, F.R.S.

Delivered MONDAY, JUNE 18, 1883

HIS ROYAL HIGHNESS

THE PRINCE OF WALES, K.G.

President of Her Majesty's Commissioners

IN THE CHAIR.

LONDON

WILLIAM CLOWES AND SONS, LIMITED

INTERNATIONAL FISHERIES EXHIBITION

AND 13 CHARING CROSS, S.W.



International Fisheries Exhibition

LONDON, 1883

Inaugural Meeting of the Fishery Congress

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PROFESSOR ^{Thomas} HUXLEY, F.R.S.

Delivered Monday, June 18, 1883

H.R.H. THE PRINCE OF WALES, K.G.

PRESIDENT OF HER MAJESTY'S COMMISSIONERS

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International Fisheries Exhibition,

LONDON, 1883.

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INAUGURAL MEETING OF THE CONGRESS.

H.R.H. THE PRINCE OF WALES.

12-16-37
✓ E.M.

YOUR Excellencies, my Lords and Gentlemen,—Before calling upon Professor Huxley to deliver his inaugural address to you, I am anxious to welcome all those gentlemen of the International Jury on coming here to-day at the opening of our Congress. The Fisheries Exhibition, up to the present moment, I think, may be considered to have been a success. The number of people who have visited it evince the interest taken in this great and national undertaking, as I believe I am not wrong in stating that not far short of half-a-million have already seen it. But to-day, when the duties of the jurors are about to commence, we may look upon the scientific and more important part of the Fisheries Exhibition as about to commence ; and I beg to thank all those gentlemen who have come forward, not only from our own country, but from different parts of the world, to give us their assistance ; and I feel sure that their labours will be crowned with success. I will now call upon Professor Huxley to deliver his inaugural address.

PROFESSOR HUXLEY.

Your Royal Highness, your Excellencies, my Lords and Gentlemen,—It is doubtful whether any branch of industry can lay claim to greater antiquity than that of Fishery. Its

origin would seem to be coeval with the earliest efforts of human ingenuity ; for the oldest monuments of antiquity show us the fisherman in full possession of the implements of his calling ; and even those tribes of savages, who have reached neither the pastoral nor the agricultural stages of civilization, are skilled in the fabrication and in the use of the hook, the fish-spear, and the net.

Nor is it easy to exaggerate the influence which the industry thus early practised and brought to a considerable degree of perfection, has directly and indirectly exerted upon the destinies of mankind, and especially upon those of the nations of Europe. In our quarter of the globe, at any rate, Fishery has been the foster-mother of navigation and of commerce, and the disseminator of the germs of civilization.

Four thousand years ago, Europe was inhabited by tribes of intelligent savages whose social state stood in much the same relation to that of the polities on the banks of the Nile and the Euphrates, even then old, as that of the Polynesians did to the civilization of Europe a century ago.

But about, or perhaps before, that time certain tribes of Canaanites had built their huts on the shores of the Levant, and launched their canoes in search of the fishes which people the easternmost waters of the Mediterranean. The site of one of these fishing villages seems to have especially adapted it to the purposes of fishermen, for they called it Sidon, which Semitic scholars tell us means "The Fishery." These enterprising people, animated by the genius for commerce, which then, as now, distinguished their race, set up a trade in dried and salted fish, which rapidly attained a considerable development. But their chief energies were devoted to the collection of a certain kind of mollusks, very similar to our common dogwhelks ; and to the preparation

from them of that famous Tyrian purple, which, from the richness and the variety of its hues, and from its wonderful stability, was prized more highly and sought after more eagerly than any other dye known to the ancients. Combining with this trade that in the metals, and especially in tin, these primitive corporations of Fishmongers gradually extended their operations, until they raised Sidon, and after the fall of Sidon, Tyre, to a position not less remarkable than that occupied by Venice in the Middle Ages, or by Liverpool, or New York, in our own times.

Tyre became the commercial emporium of the ancient world, "enriching the kings of the earth with the multitude of her riches and of her merchandise;" and the constantly increasing demand for the raw materials of her staple manufactures, purple fabrics and bronze, impelled her merchants to push their maritime enterprizes further and further, until they created the best fleets and the boldest sailors which the world at that time possessed.

Phœnician factories and fishing stations rapidly extended over the islands of the Ægean into the Black Sea, stretched along both shores of the Mediterranean and reached the Atlantic seaboard in Spain and in Morocco. These energetic sea-folk—fishermen, traders, pirates, or kidnappers, as occasion might offer for the assumption of one or the other character,—wherever they touched, carried the arts which they had invented or learned from Egypt or from Babylonia, and stirred the slumbering powers of the teachable savages of Europe with an impulse the traces of which can never be effaced. The European child of to-day, who learns his alphabet, calls the letters by their names simply because the Phœnicians were pleased to make similar figures the symbols of certain sounds. And it is a fair supposition that the Phœnicians may have

been driven to invent their alphabet by the inconvenience of ideographic writing for the keeping of the books and the conduct of the correspondence of the great commerce which had grown out of Fishery.

These few remarks must suffice to indicate the wide field of interesting research which fisheries offer to the philosophical historian ; and I pass on to speak of the fisheries from the point of view of our present practical interests.

The supply of food is, in the long run, the chief of these interests. Every nation has its anxiety on this score, but the question presses most heavily on those who, like ourselves, are constantly and rapidly adding to the population of a limited area, and who require more food than that area can possibly supply. Under these circumstances, it is satisfactory to reflect that the sea which shuts us in, at the same time opens up to us supplies of food of almost unlimited extent.

The produce of the sea around our coasts bears a far higher proportion to that of the land than is generally imagined. The most frequented fishing grounds are much more prolific of food than the same extent of the richest land. Once in a year, an acre of good land, carefully tilled, produces a ton of corn, or two or three hundredweight of meat or cheese. The same area at the bottom of the sea in the best fishing grounds yields a greater weight of food to the persevering fisherman every week in the year. Five vessels belonging to the same source in a single night's fishing brought in 17 tons weight of fish—an amount of wholesome food equal in weight to that of 50 cattle or 300 sheep. The ground which these vessels covered during the night's fishing could not have exceeded an area of 50 acres.

My colleagues * and I made this statement a good many years ago. I have recently tried to discover what yield may be expected, not from the best natural fishing grounds, but from piscicultural operations. At Comacchio, close to the embouchure of the Po into the Adriatic, there is a great shallow lagoon, which covers some 70,000 acres, and in which pisciculture has been practised in a very ingenious manner for many centuries. The fish cultivated are eels, grey mullet, atherines, and soles; and, according to the figures given by M. Coste,† the average yield for the sixteen years from 1798 to 1813 amounted to 5 cwt. per acre, that is to say, double the weight of cheese or meat which could have been obtained from the same area of fair pasture land in the same time. Thus the seas around us are not only important sources of food, but they may be made still more important by the artificial development of their resources. But this Exhibition has brought another possibility within the range of practically interesting questions. A short time ago, a visitor to the market might have seen fresh trout from New Zealand lying side by side with fresh salmon, some of which came from Scandinavia and some from the lakes and rivers of North America. Steam and refrigerating apparatus combined have made it possible for us to draw upon the whole world for our supplies of fresh fish. In my boyhood, "Newcastle" was the furthest source of the salmon cried about the streets of London, and that was generally pickled. My son, or at any rate

* Sir James Caird and Mr. G. Shaw Lefevre, M.P. See the Report of the Commissioners appointed to inquire into the Sea Fisheries of the United Kingdom, 1866.

† Voyage d'exploration sur le littoral de la France et de l'Italie, 1855.

my grandson, when he goes to buy fish, may be offered his choice between a fresh salmon from Ontario and another from Tasmania.

The fishing industry being thus important and thus ancient, it is singular that it can hardly be said to have kept pace with the rapid improvement of almost every other branch of industrial occupation in modern times. If we contrast the progress of fishery with that of agriculture, for example, the comparison is not favourable to fishery.

Within the last quarter of a century, or somewhat more, agriculture has been completely revolutionized, partly by scientific investigations into the conditions under which domestic animals and cultivated plants thrive; and partly by the application of mechanical contrivances, and of steam as a motive power, to agricultural processes.

The same causes have produced such changes as have taken place in fishery, but progress has been much slower. It is now somewhat more than twenty years since I was first called upon to interest myself especially in the sea fisheries; and my astonishment was great when I discovered that the practical fishermen, as a rule, knew nothing whatever about fish, except the way to catch them.

In answer to questions relating to the habits, the food, and the mode of propagation of fishes—points, be it observed, of fundamental importance in any attempt to regulate fishing rationally—I usually met with vague and often absurd guesses in the place of positive knowledge. The Royal Commission, of which I was a member in 1864 and 1865, was appointed chiefly on account of the allegation by the line fishermen that the trawlers destroyed the spawn of the white fish—cod, haddock, whiting, and the like. But, in point of fact, the “spawn” which was produced in support

of this allegation, consisted of all sorts of soft marine organisms, except fish. And if the men of practice had then known what the men of science have since discovered, that the eggs of cod, haddock, and plaice float at the top of the sea, they would have spared themselves and their fellow-fishermen, the trawlers, a great deal of unnecessary trouble and irritation. Thanks to the labours of Sars in the Scandinavian Seas, of the German Fishery Commission in the Baltic and North Sea, and of the United States Fishery Commission in American waters, we now possess a great deal of accurate information about several of the most important of the food fishes, and the foundations of a scientific knowledge of the fisheries have been laid. But we are still very far behind scientific agriculture ; and, as to the application of machinery and of steam to fishery operations, it may be said that, in this country, a commencement has been made, but hardly more.

This relative backwardness of the fishing industry greatly impressed my colleagues and myself in the course of the inquiries of the Royal Commission to which I have referred ; and I beg permission to quote some remarks on this subject, which are to be found in our Report.

“When we consider the amount of care which has been bestowed on the improvement of agriculture, the national societies which are established for promoting it, and the scientific knowledge and engineering skill which have been enlisted in its aid, it seems strange that the sea fisheries have hitherto attracted so little of the public attention. There are few means of enterprise that present better chances of profit than our sea fisheries, and no object of greater utility could be named than the development of enterprise, skill, and mechanical ingenuity which might be elicited by the periodical exhibitions and publications

of an influential society specially devoted to the British Fisheries."*

I trust that I am not too sanguine in looking upon the crowds who throng to the present remarkable Exhibition as evidence that public attention is now thoroughly attracted to the sea and other fisheries. As this is the third exhibition of its kind which has been held in these islands, I think I may say that the periodical exhibitions for which we ventured to hope have come into existence. And I am thereby encouraged to express a confident belief that our final anticipation will be realized; and that, in these Conferences, we have the germ out of which, by due process of evolution, a society specially devoted to the promotion of the interests of the Fisheries of these islands may spring.

Whether this vaticination is fulfilled or not, I think that the promoters of this Exhibition may be congratulated on the achievement of a success peculiar to themselves. So far as I know, in no preceding Fishery Exhibition has advantage been taken of the assemblage of so many representatives of fishery interests from all parts of the world—fishery knights and burgesses, if I may so call them—to form a Fishery Parliament such as that at the opening of which your Royal Highness presides to-day. Personally, I should have been very glad if the Conferences could have opened with a communication so full of interest and instruction as that which embodies the results of the practical acquaintance with the sea fisheries gained by His Royal Highness the Duke of Edinburgh during his three years of office as Admiral commanding the Naval Reserves, which you will have the pleasure of hearing to-morrow. But, since the duty

* Report of the Commissioners appointed to inquire into the Sea Fisheries of the United Kingdom, 1866, p. 17.

of opening the Conferences has been laid upon me, I must endeavour, after these preliminary remarks, to bring under your notice some topic of the same order as those which will be discussed in the conferences which follow. Of such topics I need hardly say that this Exhibition affords an abundant store. But I have been obliged to pass by many which, under ordinary circumstances, I should have gladly seized upon ; because I should not like to be charged with an abuse of my opportunities as first comer by any of the twenty or thirty gentlemen who have undertaken to deal with the subjects of future conferences.

But on looking over the list of allotted subjects, I find there is yet one important topic unappropriated—unless it belongs to Mr. Shaw Lefevre, in which case I hope that my former colleague will forgive my depredations—and that is the question, **WHETHER FISHERIES ARE EXHAUSTIBLE ; AND IF SO, WHETHER ANYTHING CAN BE DONE TO PREVENT THEIR EXHAUSTION ?**

It so happens that I have had occasion to devote very particular attention to these questions, and to express definite opinions about them. And as these opinions seem to me to have been more often attacked than understood, I am glad to have the opportunity of briefly, but I hope clearly, submitting them, with the grounds on which they are based, to your judgment.

Are fisheries exhaustible ? That is to say, can all the fish which naturally inhabit a given area be extirpated by the agency of man ?

I do not think that this question can be answered categorically. There are fisheries and fisheries.

I have no doubt whatever that some fisheries may be exhausted. Take the case of a salmon river, for example. It needs no argument to convince any one who is familiar

with the facts of the case that it is possible to net the main stream, in such a manner, as to catch every salmon that tries to go up and every smolt that tries to go down. Not only is this true, but daily experience in this country unfortunately proves that pollutions may be poured into the upper waters of a salmon river of such a character and in such quantity as to destroy every fish in it.

In this case, although man is only one of many agents which are continually effecting the destruction of salmon in all stages of its existence—although he shares the work with otters and multitudes of other animals, and even with parasitic plants—yet his intelligence enables him, whenever he pleases, to do more damage than all the rest put together ; in fact, to extirpate all the salmon in the river and to prevent the access of any others.

Thus, in dealing with this kind of exhaustible fishery, the principle of the measures by which we may reasonably expect to prevent exhaustion is plain enough. Man is the chief enemy, and we can deal with him by force of law. If the stock of a river is to be kept up, it must be treated upon just the same principles as the stock of a sheep farm.

If an Australian sheep farmer is to be successful in his business he knows very well what he has to do. He must see that his sheep have a sufficient supply of food, he must take care that a sufficient breeding stock is preserved, and he must protect his sheep from all enemies but himself. He must defend his sheep, young and old, not only against the ravages of the wild dog, against infectious diseases, and against parasites ; but it is sometimes a very serious matter to protect them against the competition of other herbivorous animals, such as kangaroos, which appropriate the food destined for the sheep. And it is no easy matter to carry out an efficient system of protection. The destruction of

the wild dogs may lead to the over multiplication of the kangaroos, and the destruction of the kangaroos may lead the wild dogs to devote their energies too seriously to the sheep. If the sheepowner does not take care what he is about, his very sheep dogs may become disseminators of the staggers among his flock. Moreover, the sheepowner must not let the butcher take more than a certain percentage of his sheep for boiling down, or the stock will be unduly diminished. It is only by incessant attention to all these points that a sheep farmer is successful ; and, let him be as attentive as he likes, every now and then some variation in those conditions which are beyond his control—a sudden flood or a long drought, or the straying of a diseased sheep from another run—may bring him to ruin.

Now, if you will consider the action of the conservators of a salmon river, you will see that they, at any rate, strive to do for the salmon that which a careful shepherd does for his sheep. Obstacles in the way of free access to the breeding grounds are removed by the construction of fish passes ; the breeding stock is protected by the annual close time ; animals which prey on the fish, or compete dangerously with them, are kept down ; or the salmon are placed at an advantage by artificially stocking the river. Finally, the destructive agency of man, who plays the part of the butcher, is limited by removal of pollution—by the prohibition of taking parr and smolts—by the restrictions on the character and on the size of meshes of nets ; and, indirectly, by the license duty on nets and rods.

Whether the state of the law is such as to permit the work of the conservator to be carried out efficiently, or not, is a point which will, I doubt not, be fully discussed by-and-by. All I desire to show is that, in principle, the

measures adopted by the conservators, if they are to be efficient, must be identical with those of the sheep farmer.

And the analogy is complete, for when the conservator has done all he can, droughts, parasites, and other natural agents which are beyond human control, may nullify his efforts. In the case of the salmon, as in that of the sheep, careful and intelligent protection may promote the prosperity of the stock to any conceivable extent; but it cannot ensure that prosperity, nor prevent immense fluctuations in the yield from year to year.

A salmon fishery then (and the same reasoning applies to all river fisheries) can be exhausted by man because man is, under ordinary circumstances, one of the chief agents of destruction; and, for the same reason, its exhaustion can usually be prevented, because man's operations may be controlled and reduced to any extent that may be desired by force of law.

And now arises the question, Does the same reasoning apply to the sea fisheries? Are there any sea fisheries which are exhaustible, and, if so, are the circumstances of the case such that they can be efficiently protected? I believe that it may be affirmed with confidence that, in relation to our present modes of fishing, a number of the most important sea fisheries, such as the cod fishery, the herring fishery, and the mackerel fishery, are inexhaustible. And I base this conviction on two grounds, first, that the multitude of these fishes is so inconceivably great that the number we catch is relatively insignificant; and, secondly, that the magnitude of the destructive agencies at work upon them is so prodigious, that the destruction effected by the fisherman cannot sensibly increase the death-rate.

At the great cod-fishery of the Lofoden Islands, the fish approach the shore in the form of what the natives call "cod mountains"—vast shoals of densely-packed fish, 120 to 180 feet in vertical thickness. The cod are so close together that Professor Sars tells us "the fishermen, who use lines, can notice how the weight, before it reaches the bottom, is constantly knocking against the fish." And these shoals keep coming in one after another for two months, all along the coast.

A shoal of codfish of this kind, a square mile in superficial extent, must contain, at the very least, 120,000,000 fish.* But it is an exceptionally good season if the Lofoden fishermen take 30,000,000 cod; and not more than 70,000,000 or 80,000,000 are taken by all the Norwegian fisheries put together. So that one fair shoal of all that approach the coast in the season must be enough to supply the whole of the codfish taken by the Norwegian fisheries, and leave a balance of 40,000,000 or 50,000,000 over.

The principal food of adult cod appears to be herring. If we allow only one herring to each codfish per diem, the cod in a square mile of shoal will consume 840,000,000 herring in a week. But all the Norwegian fisheries put together do not catch more than half that number of herring. Facts of this kind seem to me to justify the belief that the take of all the cod- and herring-fisheries, put together, does not amount to 5 per cent. of the total number of the fish. But the mortality from other sources is enormous. From the time the fish are hatched, they are attacked by other marine animals. The great shoals are attended by hosts of dog-fish, pollack, cetaceans and birds, which prey upon them day and night, and cause a destruction

* This allows over four feet in length for each fish, and a yard between it and those above, below, and at the sides.

infinitely greater than that which can be effected by the imperfect and intermittent operations of man.

I believe, then, that the cod fishery, the herring fishery, the pilchard fishery, the mackerel fishery, and probably all the great sea fisheries, are inexhaustible ; that is to say, that nothing we do seriously affects the number of the fish. And any attempt to regulate these fisheries seems consequently, from the nature of the case, to be useless.

There are other sea fisheries, however, of which this cannot be said.

Take the case, for example, of the oyster fisheries, so far as it concerns beds which are outside the three-mile limit of the territorial jurisdiction of this country. Theoretically, at any rate, an oyster bed can be dredged clean. In practice, of course it ceases to be worth while to dredge long before this limit is reached. But we may assume, for the sake of argument, that an oyster bed may be thus stripped. In this case, the oyster bed is in the same position as a salmon river. The operations of man bear a very large proportion to the sum of destructive agencies at work, and it may seem that restriction by force of law should be as useful in the one case as in the other.

But it must not be forgotten that the efficacy of salmon protection depends on its completeness. What would be the value of the Salmon Acts if they contained only two provisions—the first that there shall be an annual close time, and the second that no parr or smolts shall be captured ? Is it not obvious that there would be as good as no protection at all, inasmuch as every salmon that tried to ascend the river might be captured during the open season, and then, of course, there would be neither breeding fish nor smolts to protect ?

And yet this is all that the restrictions on oyster fishing enforced in this country have ever aimed at.

At one time, we enforced an annual close time, and we said that oysters below a certain size should not be taken ; but I am at a loss to divine how the strictest enforcement of these regulations could prevent any one from stripping a bed bare of every adult oyster during the open season. But the interference with the removal of oysters below a certain size is so obviously a measure in the interest of dog-whelks and star-fish, and against man, that we have given that up, and now we only insist upon the four months' close time ; which appears to me to be just as rational as it would be to prohibit the catching of salmon in December, January, and February, and permit the destruction of young and old by all imaginable means and to any extent, during the rest of the year.

The only protection of oysters which can possibly be efficient is some such system as that pursued in Denmark and in France—where the beds are the property of the State—where an estimate is made of the quantity of oysters in a bed—and where fishing is permitted only to the extent justified by that estimate.

How far the results of such a system of protection of oyster beds justify its adoption is a question which I will not at present attempt to discuss ; but I think it must be perfectly clear to every one acquainted with the circumstances of our deep-sea oyster beds, that it is utterly impracticable to apply any such system to them. Who is to survey these beds ? Who is to watch them ? Who is to see that the dredgers do not take more than their allotted share ? Who is to prevent fishermen sailing under the flag of a nation with which we have no fishery convention, from disregarding our regulations ?

Thus I arrive at the conclusion—first, that oyster fisheries may be exhaustible ; and secondly, that for those which lie outside the territorial limit no real protection is practically possible. In the case of the oyster fisheries which lie inside the territorial limit the case is different. Here the State can grant a property in the beds to corporations or to individuals whose interest it will become to protect them efficiently. And this I think is the only method by which such fisheries can be preserved.

I have selected the oyster fisheries as those sea fisheries, for the possible exhaustion of which there is most to be said. I have no doubt that those who take up the subjects of trawling and of the shell fisheries will discuss the question in relation to those fisheries. All I desire to remark is, that if any of these fisheries should prove to be exhaustible, and in course of exhaustion, close time and the restriction of the size of fish taken cannot save them, unless those measures are accompanied by the limitation of the number of fish taken during the open season. And in the case of trawling, I am quite unable to imagine how such a limitation could be practically enforced.


I have ventured to dwell upon this topic of the exhaustibility of fisheries at some length, because it is of great importance, not only to the consumer, but to the fisherman. It is to current opinion on this subject that we owe fishery legislation. Now every legislative restriction means the creation of a new offence. In the case of fishery it means that a simple man of the people, earning a scanty livelihood by hard toil, shall be liable to fine or imprisonment for doing that which he and his fathers before him have, up to that time, been free to do.

If the general interest clearly requires that this burden should be put upon the fisherman—well and good. But

if it does not—if, indeed, there is any doubt about the matter—I think that the man who has made the unnecessary law deserves a heavier punishment than the man who breaks it.

COUNT MUNSTER (German Ambassador) proposed a vote of thanks to Professor Huxley for the very able and interesting address he had delivered—a motion which he was sure would meet with universal approval. His Royal Highness had told them that the practical part of the Exhibition had already proved a great success, more than half a million of people having come to witness what was exhibited in so agreeable a manner. He had always been convinced that the importance of the fishery industry could not be over-estimated, and had done his best to impress this truth on his own countrymen. He was certain that every fisherman, whether professional or amateur, could learn a great deal there, but he could not learn it properly without the assistance of science. The scientific department of the Exhibition had now been opened, and it must be considered a very good omen that a man of such high standing as Professor Huxley had delivered the opening address.

LORD NORTHBROOK, in seconding the resolution, said he was sure he was only expressing the views of all present when he ventured the opinion that His Royal Highness could not have made a more admirable choice in the gentleman whom he and the Committee had selected to open the Conference. Professor Huxley, from his original connection with the sea, from his high scientific attainments, from having been associated in the past with scientific inquiries into this subject, and from his present official position, was most admirably suited for this post, and he need hardly



say that he had most excellently fulfilled the duty which devolved upon him. He should not attempt to enter into any of the questions which had been mentioned, but it had given him great satisfaction to be present, not only on account of the essentially practical character of the Conference, but because as a member of the Legislature he had received advice from Professor Huxley which he should carry away with him and endeavour to put in practice.

The resolution was carried unanimously.

The TURKISH AMBASSADOR then proposed a vote of thanks to His Royal Highness the Prince of Wales for presiding at the inauguration of the International Congress.

LORD GRANVILLE seconded the resolution. He had no doubt that the Prince would highly appreciate the compliment which had been paid to him by his distinguished friend the Ambassador of Turkey, who represented those foreign gentlemen whom they were so glad to see, and who had added greatly to the interest of the Congress by their presence. If he might be allowed to represent His Royal Highness's countrymen, he felt that he might abstain from any mere compliment, and merely acknowledge one remarkable characteristic of His Royal Highness, which he believed to be one of the causes which had added so much to his great popularity. He referred to the desire he had evinced ever since he came of age to take part in every useful work which was open to him, considering his exalted position. And in doing so he had shown remarkable discrimination in selecting the objects with which he associated himself, and had shown not simply a spasmodic, but a continuous and persevering, interest in any work of the kind until it was successfully terminated. He remembered

a great authority with regard to public meetings saying that what the people desired was not to be instructed, but to be excited and amused. Now he never knew a man who could better than Professor Huxley condense in a very small space the instruction which people did not want, with a due proportion of the pleasure and amusement which they did. He ventured to think that after his address, at all events until it had been answered, there could not be the slightest doubt of the importance of the object with which His Royal Highness had been good enough to associate himself. With regard to the continuous attention His Royal Highness paid to such enterprises, he would merely refer to the interest which he and the Princess of Wales had shown with regard to the local exhibition at Norwich, which had developed itself, on the principle so successfully laid down by the late Prince Consort, into an International Exhibition. They all knew the impulse which he gave to the work when he presided at the first meeting on the subject, and the grace with which he represented Her Majesty on the occasion of the opening. The same thing was applicable to his position to-day. The scientific and didactic part of the work was now begun, and he therefore had the greatest pleasure in seconding the resolution.

The resolution was then put by LORD GRANVILLE, and carried unanimously.

H.R.H. THE PRINCE OF WALES, in responding, thanked the Turkish Ambassador and Lord Granville for the kind manner in which they had put the resolution, and the meeting for the way in which it had been received. It had been a source of great pleasure to him to be present at the first meeting of the Congress, and also to join in the vote of thanks which had been given to Professor Huxley for his

excellent address. He did not think anything could have been more successful, or that the duty could have been entrusted to abler hands. He had only to announce that the next meeting would take place on the following day at 12 o'clock, when he should have the pleasure of reading a paper by his brother the Duke of Edinburgh, on "British Fisheries and Fishermen." He regretted that absence in Russia prevented his brother being present and reading it himself, but he should endeavour to supply his place to the best of his ability.

